

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Contract 76561

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
F.A.U. 9105 (IL)	119 BR	MADISON	425	260A
F.A.U. 5408 (MO.)				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 1

1 SHEETS

Notes: \*Details shown are examples at one connection location only. The types of truss members meeting at a pin connection vary from location to location. Some members are comprised of several eye bar components. The number of members comprised of eye bar components that meet at a pin connection varies from zero to three. Some pin locations have a vertical gusset plate and others do not. The gusset plate shapes vary.

At the designated pin locations, the existing rods that run through the existing pins shall be removed and replaced. New nuts and washers shall be installed at each end of new rods. The existing pins and cover plates shall be reused.

During the threaded rod replacement sequence, ultrasound testing of the existing pins will be performed by the Department. See special provision for "Threaded Rod Replacement" for Contractor's responsibilities regarding this work.

The cost of removal and replacement of rods, nuts and washers and cost of temporarily clamping the existing truss members are included in the pay item Threaded Rod Replacement. New rods, nuts and washers shall be AASHTO M270 Gr. 36. See Special Provision for Threaded Rod Replacement.

As described elsewhere in these plans, the existing cantilever floorbeams are to be removed and new cantilever floorbeams are to be installed. Cost included elsewhere on plans. After removal of the existing cantilever floorbeam and before installation of the new cantilever floorbeam, the rod shall be removed and replaced. Sequence of construction for rod removal and replacement at bottom chord:

1. At pin locations where a new rod is required, the Contractor shall make a submittal to the Engineer for review and acceptance prior to removal of existing cantilever floorbeams. The submittal shall show details and sequence for temporarily clamping together the eye bar components in a member at the truss members that meet at the pin.

2. The existing cantilever floorbeam shall be removed.

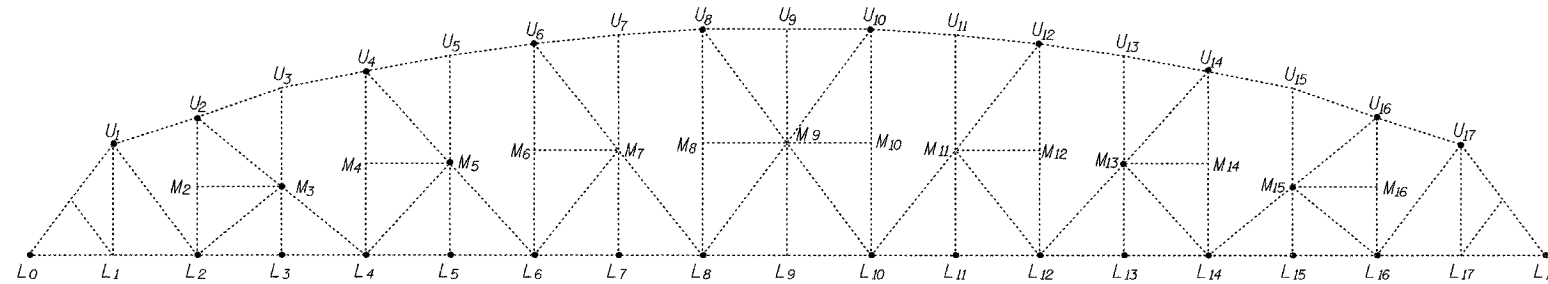
3. The truss members that meet at that pin and that are comprised of eye bar components shall be clamped together prior to removal of the existing rods. The rods and nuts shall be removed and replaced. The truss member clamps may be removed.

4. The new cantilever floorbeam shall be installed.

Sequence of construction for rod removal and replacement at top chord and at mid-truss:

1. At the pin locations where a new rod is required, the Contractor shall make a submittal to the Engineer for review and acceptance prior to removal of the existing nuts for the existing rods. The submittal shall show details and sequence for temporarily clamping together the eye bar components in a member at the truss members that meet at the pin.

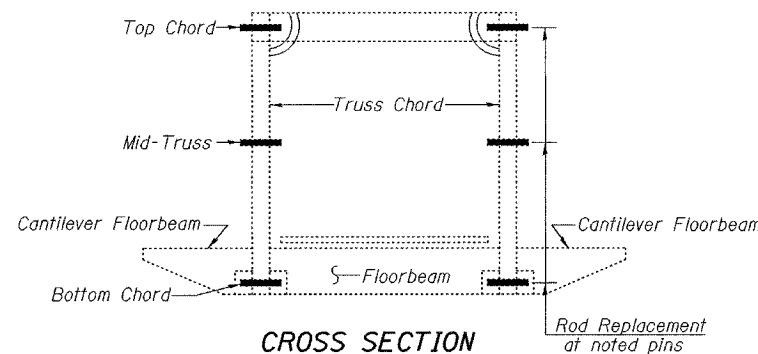
2. The truss members that meet at that pin and that are comprised of eye bar components shall be clamped together prior to removal of the existing rods. The rods and nuts shall be removed and replaced. The truss member clamps may be removed.



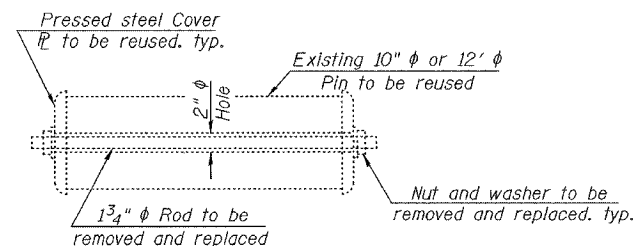
**TRUSS SPAN ELEVATION**

Spans 27, 28 and 29 similar.

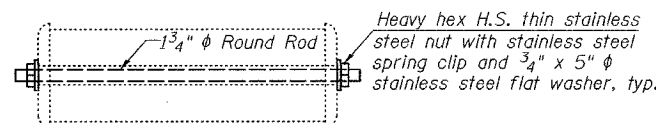
\*Indicates locations where existing rod shall be removed and new rod shall be installed.



**CROSS SECTION**



**PIN AND ROD DETAIL-EXISTING**



**PIN AND ROD DETAIL-PROPOSED**

6" min. thread length, each end of rod.

Use anti-seize compound on threads.

Rods shall be hot dip galvanized according to AASHTO M 232.

DESIGNED	S.E.M.
CHECKED	C.C.C.
DRAWN	R. Sommer
CHECKED	S.E.M. / C.C.C.

April 28, 2004  
EXAMINED *Thomas J. Domagala*  
ENGINEER OF BRIDGE DESIGN  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

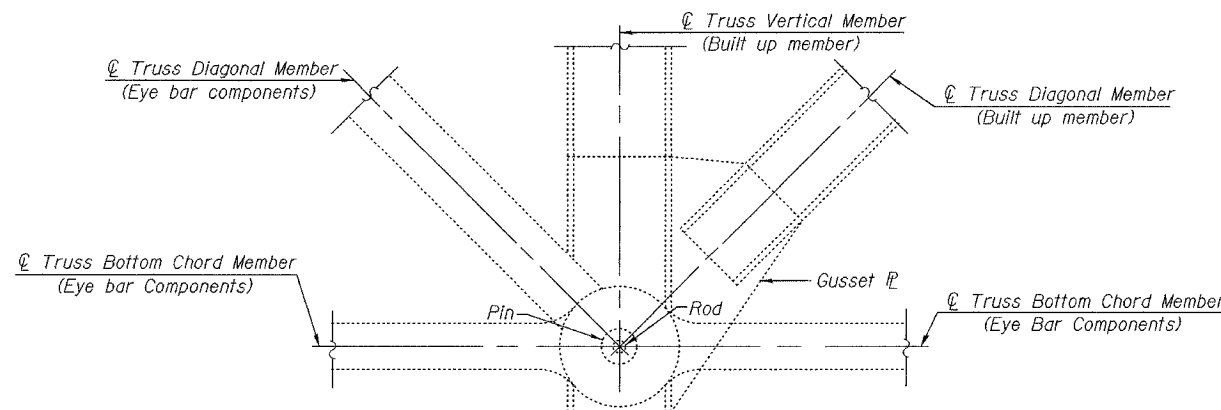


EXPIRES 11-30-2004

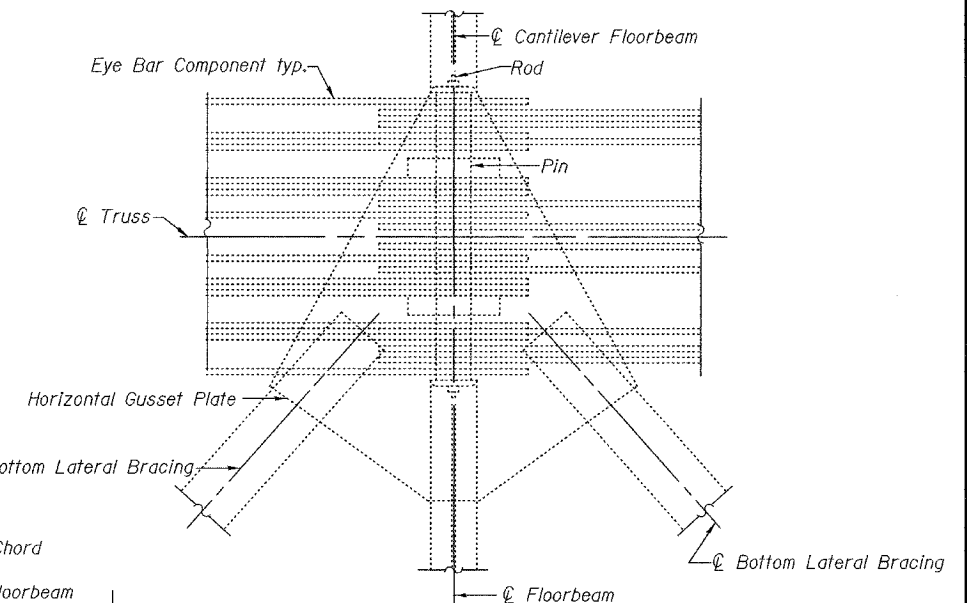
**LOCATIONS AND DIMENSIONS  
OF RODS TO BE REPLACED**

Location	Rod	Total Number of Rods Req'd.	**Pin (to remain in place)
Bottom Chord	L0, L18	12	12" φ x 3'-9 1/2"
	L2, L16	12	12" φ x 4'-1"
	L3, L4		
	L5, L6	48	12" φ x 4'-4 1/8"
	L12, L13		
	L14, L15		
	L7, L11	12	12" φ x 4'-4 5/8"
	L8, L10	12	12" φ x 4'-5 1/8"
Top Chord	U1, U17	12	12" φ x 3'-4 3/8"
	U2, U4	24	12" φ x 3'-4"
	U14, U16		
	U6, U8	24	10" φ x 3'-4"
	U10, U12		
Mid-Truss	M3, M15	12	12" φ x 2'-9"
	M5, M13	12	10" φ x 3'-1"

\*\*Existing Pin to remain in place. Dimensions provided for information only.



**\*ELEVATION**



**\*PLAN**

**BILL OF MATERIAL**

Item	Unit	Quantity
Threaded Rod Replacement	Each	180

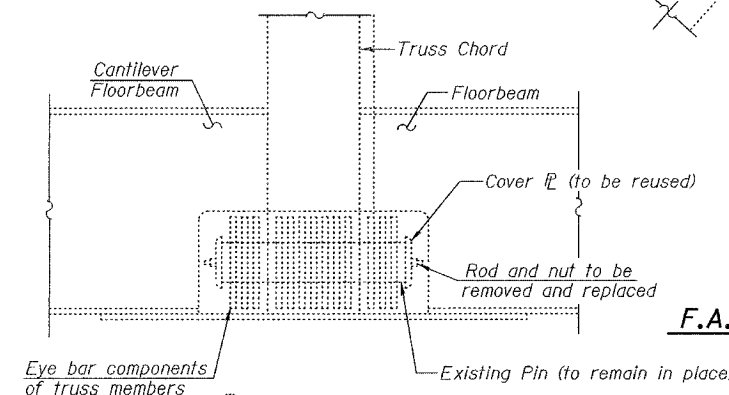
**TRUSS REPAIR**

F.A.U. RT. 9105 (IL) F.A.U. RT. 5408 (MO.) SEC. 119BR

MADISON COUNTY

STATION 100+00.00

STRUCTURE NO. 060-6002



**\*ELEVATION**